WHAT IS CLAIMED IS:

1   1.   A telecommunications system, comprising:

2   an Ethernet-type local area network; and

3   one or more telecommunications devices coupled to said Ethernet-type local

4 area network, said one or more telecommunications devices including:

5   an Internet Protocol voice communication stack;

6   a Quality of Service Ethernet layer; and

7   a Generate Quality of Service Ethernet layer interposed between said

8 Internet Protocol voice communication stack and said Quality of Service

9 Ethernet layer and adapted to intercept a second byte in an IP header, identify

10 from said second byte a quality of service required for individual calls, and

11 generate corresponding Quality of Service commands to said Quality of

12 Service Ethernet layer.

1   2.   A telecommunications system in accordance with claim 1, said second

2   byte comprising a Type of Service byte.

1   3.   A telecommunications system in accordance with claim 1, said second

2   byte comprising a Differentiated Service byte.

1   4.   A telecommunications system in accordance with claim 2,

2   wherein said Quality of Service Ethernet layer and said Generate

3   Quality of Service Ethernet layer are modular.

1   5.   A telecommunications system in accordance with claim 3,

2   wherein said Quality of Service Ethernet layer and said Generate

3   Quality of Service Ethernet layer are modular.

1   6.   A telecommunications device adapted to be coupled to an Ethernet-

2 type local area network, comprising:

3   an Internet Protocol voice communication stack;

4   a Quality of Service Ethernet layer; and

5   a Generate Quality of Service Ethernet layer interposed between said Internet

6 Protocol voice communication stack and said Quality of Service Ethernet layer and

7 adapted to intercept a second byte in an IP header, identify from said second byte a

8 quality of service required for individual calls, and generate corresponding Quality of

9 Service commands to said Quality of Service Ethernet layer.

1   7.   A telecommunications device in accordance with claim 6, said second

2 byte comprising a Type of Service byte.

1   8.   A telecommunications device in accordance with claim 6, said second

2 byte comprising a Differentiated Service byte.

1   9.   A telecommunications device in accordance with claim 7, wherein said

2 Quality of Service Ethernet layer and said Generate Quality of Service Ethernet layer

3 are modular.

1   10.   A telecommunications device in accordance with claim 8, wherein said

2 Quality of Service Ethernet layer and said Generate Quality of Service Ethernet layer

3 are modular.

1   11.   A method comprising:

2   intercepting a second byte from an Internet Protocol header;

3   identifying from said second byte a quality of service required for individual

4 calls; and

5   generating corresponding Quality of Service commands to a Quality of

6 Service Ethernet layer

1   12.   A method, comprising:

2   beginning an IP multimedia call;

3   encapsulating corresponding messages for said IP multimedia call in IP

4 protocol data packets;

5   setting a·second byte of an IP header for said IP protocol data packets;

6   · reading said second byte before said IP protocol data packets are sent over a

7 network;

8   accessing a lookup table, said lookup table containing entries for mapping

9 said second byte to QoS Ethernet quality of service commands;

10   sending said QoS Ethernet quality of service commands to a QoS Ethernet

11 layer; and

12   sending said IP protocol data packets over an Ethernet network using said

13 quality of service.

1 13.   A method according to claim 12, wherein said second byte comprises a type

2 of service byte.

1 14.   A method according to claim 12, said second byte comprising a differentiated

2 service byte.

1   15.   A system, comprising:

2   means for beginning an IP multimedia call;

3   means for encapsulating corresponding messages for said IP multimedia· call

4 in IP protocol data packets;

5   means for setting a second byte of an IP header for said IP protocol data

6 packets;

7   means for reading said second byte before said IP protocol data packets are

8 sent over a network;

9   means for accessing a lookup table, said lookup table containing entries for

10 mapping said second byte to QoS Ethernet quality of service commands;

11   means for sending said QoS Ethernet quality of service commands to a QoS

12 Ethernet layer;·and

13   means for sending said IP protocol data packets over an Ethernet network

14 using said quality of service.

1 16.   A system according to claim 15, wherein said second byte comprises a type

2 of service byte.

1 17.　A system according to claim 15, said second byte comprising a differentiated
2 service byte.